

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1.-4. (Cancelled)
5. (Withdrawn) A method of performing dialysis, comprising selecting a patient suffering from chronic acidosis, and performing dialysis on the patient with a dialysate according to any one of claims 1-4.
6. (Cancelled)
7. (Withdrawn) A method of performing dialysis, comprising selecting a patient that is heparin-free, and maintaining that patient in a heparin free state while performing dialysis on that patient with a dialysate according to any one of claims 1-4.
8. (Withdrawn) A method of increasing the re-use of dialyzers, comprising performing dialysis on a patient with a dialysate according to any one of claims 1-4.
9. (Withdrawn) A method of increasing the dose of dialysis during a dialysis treatment, comprising performing dialysis with a dialysate according to any one of claims 1-4.
10. – 35. (Cancelled)
36. (New) A method of performing hemodialysis on a post-operative patient suffering from acute kidney failure, wherein the method comprises performing the hemodialysis in a dialyzer with a dialysate composition comprising citrate at a concentration ranging from 2.4

to 20 mEq/L, calcium at a concentration ranging from 2.5 to 5 mEq/L and magnesium at a concentration ranging from 0.75 to 2 mEq/L.

37. (New) The method of Claim 36 wherein the dialysate composition further comprises a buffering anion selected from the group consisting of acetate, in the form of an acetate salt, and lactate, in the form of a lactate salt, or a mixture thereof, at a concentration ranging from about 0.01 to about 2.5 mEq/L.

38. (New) The method of Claim 36 wherein the dialysate composition further comprises sodium bicarbonate at a concentration ranging from about 25 to about 40 mEq/L.

39. (New) The method of Claim 36 wherein the dialysate composition further comprises sodium chloride at a concentration ranging from about 110 to about 140 mEq/L.

40. (New) The method of Claim 36 wherein the citrate is in the form of citric acid, sodium dihydrogen citrate, disodium hydrogen citrate, trisodium citrate, potassium dihydrogen citrate or dipotassium hydrogen citrate, or any mixture thereof.